

APPENDIX A
"CLEAN" VERSION OF EACH PARAGRAPH/SECTION/CLAIM
37 C.F.R. § 1.121(b)(ii) AND (c)(i)

SPECIFICATION:

Paragraph at page 2, line 1 to page 2, line 2:

BACKGROUND OF THE INVENTION

Q1 The invention relates to an intraocular lens having a central lens area and a surrounding annular lens area.

Paragraph at page 2, line 19 to page 2, line 20:

Q2 This object is achieved according to the invention by an intraocular lens with an optical lens part, which has a central lens area and at least one further annular lens area surrounding said central lens area, the central lens area and the at least one annular lens area forming at least one common focus and the annular lens area having concentric annular zones, in which the difference in pathlength between adjacent zones is an integral multiple of $n=2$ or more of the design wavelength.

Paragraphs at page 4, line 18 to page 5, line 12:

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 shows a sectional representation through one half of a lens body of an intraocular lens, and

Q3 Figure 2 shows a graphic representation to explain an additional diffractive fine structure, for the forming of a bifocal intraocular lens.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

The optical lens part 1, represented in the figures, of an intraocular lens has a central, in

particular refractive, lens area 2 and a lens ^{area} are 3 arranged in an annular form around the central lens area 2. The annular lens area 3 is located in an edge zone of the lens body. In the case of the exemplary embodiment represented, fine structure elements, in particular with a sawtooth shape, are arranged both on the front side and on the rear side of the lens body in concentric zones around the optical axis 6 of the lens part 1. It is also possible, however, to provide the sawtooth-like zones only on one side of the lens (front side or rear side).

Paragraph at page 9, line 1 to page 9, line 9:

CLAIMS (with indication of amended or new):

Amended 1. An intraocular lens comprising
an optical lens part which has a central lens area and at least one further annular
lens area surrounding the central lens area, wherein the central lens area and the at least one
annular lens area form at least one common focus; the annular lens area having concentric
annular zones each with a respective optical path of a respective path length, wherein the
difference in path length of the optical path between adjacent concentric zones is an integral
multiple of $n = 2$ or more of a design wavelength.

Amended 2. The intraocular lens as claimed in claim 1, wherein the difference in path length is set by at least one of a selected refractive index of a material or a geometry of the respective zone.

Amended 3. The intraocular lens as claimed in claim 1, wherein the annular zones are formed in a sawtooth-like manner.

Amended 4. The intraocular lens as claimed in claim 1, wherein the lens has a lens body with opposite front and rear sides and the annular zones are provided on at least one of the front and rear sides of the lens body.

Amended 5. The intraocular lens as claimed in claim 1, wherein a refractive component is formed in the central lens area.

Amended 6. The intraocular lens as claimed in claim 1, wherein the optical lens part has a further meridian section an aspherical curvature profile.

Amended 7. The intraocular lens as claimed in claim 6, wherein the annular area with the concentric zones has the different path lengths arranged in the lens part in which the aspherical curvature profile has an effect.

Amended 8. The intraocular lens as claimed in claim 1, wherein the annular lens area has a width of approximately 0.8 mm to 0.9 mm.

New 9. The intraocular lens as claimed in claim 1, wherein the central lens area has a diameter of approximately 4 mm.

Amended 10. The intraocular lens as claimed in claim 1, wherein the lens has an outer lens edge with an approximately semicircular cross section.

Amended 11. The intraocular lens as claimed in claim 1, wherein the central lens area has a smooth surface.

Amended 12. The intraocular lens as claimed in claim 1, wherein the lens is a bifocal lens having additional diffractive zones on the optical lens part.

Amended 13. The intraocular lens as claimed in claim 12, wherein the additional diffractive zones are provided on the central lens area, forming the refractive component.

Amended 14. The intraocular lens as claimed in claim 12, wherein the additional

diffraction zones are shaped so that the difference in path length between the adjacent diffraction zones is a fraction of a design wavelength.

Amended 15. The intraocular lens as claimed in claim 14, wherein the difference in path length between the adjacent diffraction zones is 0.4 or 0.6 of the design wavelength.

Amended 16. The intraocular lens as claimed in claim 15, wherein the design wavelength lies in the green spectral range of visible light.

New. 17. The intraocular lens as claimed in claim 1, wherein the annular lens area has a width of approximately 0.8 mm to 0.9 mm, in particular 0.835 mm.

ABSTRACT:

An intraocular lens with an optical lens part, which has a central lens area and at least one further annular lens area surrounding the central lens area, the central lens area and the at least one annular lens area forming at least one common focus and the annular lens area having concentric annular zones, in which the difference in pathlength between adjacent zones is an integral multiple of $n=2$ or more of the design wavelength.

APPENDIX B
VERSION WITH MARKINGS TO SHOW CHANGES MADE
37 C.F.R. § 1.121(b)(iii) AND (c)(ii)

SPECIFICATION:

Paragraph at page 2, line 1 to page 2, line 2:

BACKGROUND OF THE INVENTION

The invention relates to an intraocular lens having a central lens area and a surrounding annular lens area [according to the preamble of patent claim 1].

Paragraph at page 2, line 19 to page 2, line 20:

This object is achieved according to the invention by an intraocular lens with an optical lens part, which has a central lens area and at least one further annular lens area surrounding said central lens area, the central lens area and the at least one annular lens area forming at least one common focus and the annular lens area having concentric annular zones, in which the difference in pathlength between adjacent zones is an integral multiple of $n=2$ or more of the design wavelength [the defining features of patent claim 1].

Paragraphs at page 4, line 18 to page 5, line 12:

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 [figure 1] shows a sectional representation through one half of a lens body of an intraocular lens, and

Figure 2 [figure 2] shows a graphic representation to explain an additional diffractive fine structure, for the forming of a bifocal intraocular lens.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

The optical lens part 1, represented in the figures, of an intraocular lens has a central, in

particular refractive, lens area 2 and a lens are 3 arranged in an annular form around the central lens area 2. The annular lens area 3 is located in an edge zone of the lens body. In the case of the exemplary embodiment represented, fine structure elements, in particular with a sawtooth shape, are arranged both on the front side and on the rear side of the lens body in concentric zones around the optical axis 6 of the lens part 1. It is also possible, however, to provide the sawtooth-like zones only on one side of the lens (front side or rear side).

Paragraph at page 9, line 1 to page 9, line 9:

- [1 optical lens part
- 2 central lens area
- 3 annular lens area
- 4 peripheral edge
- 5 straight piece
- 6 optical axis
- 7 additional diffractive fine structure elements
- 8 refractive base curve]

CLAIMS:

Amended 1. An intraocular lens comprising [with]
 an optical lens part [,] which has a central lens area and at least one further
 annular lens area surrounding the [said] central lens area, [characterized in that] wherein the
 central lens area [(2)] and the at least one annular lens area [(3)] form at least one common focus;
 [, and in that] the annular lens area [(3)] having [has] concentric annular zones each with a
respective optical path of a respective path length, wherein [, in which] the difference in path
 length of the optical path between adjacent concentric zones is an integral multiple of $n = 2$ or
 more of [the] a design wavelength.

Amended 2. The intraocular lens as claimed in claim 1, wherein [characterized in that]

the difference in path length is set by at least one of a selected [the] refractive index of a [or the] material or a [and/or the] geometry of the respective zone.

Amended 3. The intraocular lens as claimed in claim 1, wherein [or 2, characterized in that] the annular zones are formed in a sawtooth-like manner.

Amended 4. The intraocular lens as claimed in claim 1, wherein the lens has a lens body with opposite front and rear sides and the annular zones are provided on at least one of the front and [one of claim 1 to 3, characterized in that the annular zones are provided on the front side and/or] rear sides [side] of the lens body [(1)].

Amended 5. The intraocular lens as claimed in claim 1 wherein [one of claims 1 to 4, characterized in that] a refractive component [(2)] is formed in the central lens area [(2)].

Amended 6. The intraocular lens as claimed in claim 1, wherein [one of claims 1 to 5, characterized in that] the optical lens part has a further meridian section an aspherical curvature profile.

Amended 7. The intraocular lens as claimed in claim 6, wherein [one of claims 1 to 6, characterized in that] the annular area [(3)] with the concentric zones has [having] the different path lengths arranged in the lens part in which the aspherical curvature profile has an effect.

Amended 8. The intraocular lens as claimed in claim 1, wherein [one of claims 1 to 7, characterized in that] the annular lens area [(3)] has a width of approximately 0.8 mm to 0.9 mm[, in particular 0.835 mm].

Amended 9. The intraocular lens as claimed in claim 1, wherein [one of claims 1 to 7, characterized in that] the central lens area [(2)] has a diameter of approximately 4 mm.

Amended 10. The intraocular lens as claimed in claim 1, wherein [one of claims 1 to 7, characterized in that] the lens has an outer lens edge with [(4) has] an approximately semicircular cross section.

Amended 11. The intraocular lens as claimed in claim 1, wherein [one of claims 1 to 7, characterized in that] the central lens area [(2)] has a smooth surface.

Amended 12. The intraocular lens as claimed in claim 1, wherein the lens is [one of claims 1 to 7, characterized in that, for forming] a bifocal lens[,] having additional diffractive zones [(7) are provided] on the optical lens part.

Amended 13. The intraocular lens as claimed in claim 12, wherein [characterized in that] the additional diffractive zones [(7)] are provided on the central [central] lens area, forming the refractive component [(2)].

Amended 14. The intraocular lens as claimed in claim 12, wherein the additional diffractive zones are shaped so [one of claims 1 to 13, characterized in] that the difference in path length between the adjacent diffractive zones [(7)] is a fraction of [the] a design wavelength.

Amended 15. The intraocular lens as claimed in claim 14, wherein [one of claims 1 to 14, characterized in that] the difference in path length between the adjacent diffractive zones [(7)] is 0.4 or 0.6 of the design wavelength.

Amended 16. The intraocular lens as claimed in claim 15, wherein [one of claims 1 to 15, characterized in that] the design wavelength lies in the green spectral range of visible light.

New. 17. The intraocular lens as claimed in claim 1, wherein the annular lens area has a width of approximately 0.8 mm to 0.9 mm, in particular 0.835 mm.